

# (12) UK Patent Application (19) GB (11) 2 334 781 (13) A

(43) Date of Printing by UK Office 01.09.1999

(21) Application No 9908258.8

(22) Date of Filing 17.10.1997

(30) Priority Data

(31) 9621828 (32) 19.10.1996 (33) GB  
(31) 9705589 (32) 18.03.1997

(86) International Application Data  
PCT/GB97/02873 En 17.10.1997

(87) International Publication Data  
WO98/18010 En 30.04.1998

(71) Applicant(s)

Norman Matheson Lindsay  
19 Batchelors Way, AMERSHAM, Bucks, HP7 9AH,  
United Kingdom

(72) Inventor(s)

Norman Matheson Lindsay

(51) INT CL<sup>6</sup>

G01P 3/36 , A63B 69/36 , G01B 11/00 , G01S 17/46

(52) UK CL (Edition Q)

G1A AA3 AEEX AR6 AR7 AT26 AT3  
A6D DPA

(56) Documents Cited by ISA

WO 95/35141 A JP 060114134 A US 5401030 A  
US 4254956 A US 3759528 A  
Patent Abstracts of Japan vol 005, no. 017 (P-047)  
31.1.81 & JP550146046 A (Sumitomo) 14.11.80

(58) Field of Search by ISA

INT CL<sup>6</sup> G01P

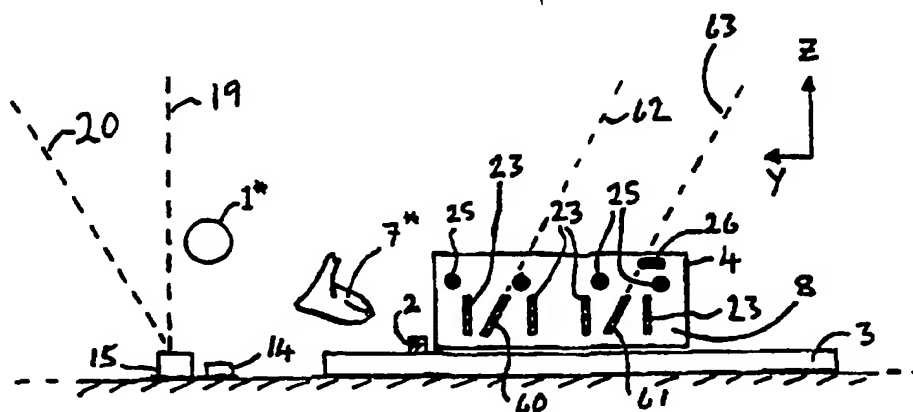
(74) Agent and/or Address for Service

Fry Heath & Spence  
The Old College, 53 High Street, HORLEY, Surrey,  
RH6 7BN, United Kingdom

(54) Abstract Title

**Apparatus for measuring parameters relating to the trajectory and/or motion of a moving article**

(57) The apparatus comprises one or more light sources (18; 15) for providing light emitted from or reflected by the moving article and one or more light sensing means (15; 12, 50, 51) arranged to provide a signal when illuminated by said light, at least one of the light sensing means (15; 12, 50, 51) being arranged to detect when the moving article intercepts a known detection plane (19, 20, 21, 64, 65, 66, 67), wherever the article intercepts the plane. The sensing means may comprise a slit aperture (10, 11, 12, 23, 60, 61) and/or cylindrical lens to define a detection plane. The apparatus may be used to measure the pre-impact and post-impact position and/or motion of a golf clubhead (7) and/or of a golf ball (1) during execution of a golf shot.



GB 2 334 781 A